

ART 34 AMDT

18

## Claims

1. Method for forwarding signaling messages with an original device (102, 104, 112) in a first network (110), whereby the original  
5 device supports a first signaling protocol,  
with a target device (106, 108, 116, 120) in a second network (114, 118), whereby the target device supports a second signaling  
protocol, and  
with a third network (130) connecting the first and the second  
10 network (110, 114, 118), and  
with a network access device (100) placed in the third network  
(130),

- whereby a signaling message from the original device (102, 104, 112) is transferred as tunneled over the third network (130) to  
15 the network access device (100),
- whereby it is determined by means of the network access device (100) on the basis of a target datum identifying the target device (106, 108, 116, 120) and contained in the signaling message whether the first and the second signaling protocols are  
20 identical,
- whereby in cases in which the first and the second signaling protocols are not identical, the signaling message is converted into the second signaling protocol and transferred as tunneled over the third network (130) to the target device (106, 108, 116, 120), and  
25
- whereby in cases in which the first and the second signaling protocols are identical, the signaling message is transferred unmodified over the third network (130) to the target device (106, 108, 116, 120) as tunneled.

30 2. Method according to Claim 1, characterized in that the network access device (100) carries out the protocol conversion itself.

35 3. Method according to Claim 1 or Claim 2, characterized in that the network access device (100) performs functions of a telecommunication device, which preferably serves for the switching

ART 34 AMEND

19

of connections for the transfer of voice data in a private data transfer network.

4. Method according to one of the preceding claims, characterized in that the network access device (100) performs network access functions for central devices of at least two local data transfer networks (110, 114), whereby the central devices in each case perform services for a multitude of terminal device of a data transfer network, or

10 in that the network access device (100) performs a network access function for terminal devices (152, 154) of at least one local data transfer network (154), and/or

in that the data transfer network functions according to the internet protocol or according to a protocol built upon it.

15

5. Method according to one of the preceding claims, characterized in that a signaling protocol is a signaling protocol of the H.323 protocol family or a signaling protocol built on one such signaling protocol, and/or

20 in that a signaling protocol is the SIP protocol or a protocol built on it, and/or

in that a signaling protocol is a signaling protocol for the signaling between telecommunication devices, preferably the protocol QSIG or a protocol built upon it, in particular a proprietary

25 signaling protocol.

6. Method according to one of the preceding claims, characterized by the steps:

- Reading (184) of the target datum with an access function, which  
30 reads target data of various signaling protocols,
- Determination of the first signaling protocol of the received signaling message,
- Determination of the second signaling protocol required by the target device that is related to or specified by means of the  
35 target datum,
- Comparison of the first signaling protocol with the second signaling protocol,

ATTY 24 AMEND

20

- Making the decision regarding the conversion or the forwarding of the signaling message without conversion, depending on the result of the comparison.

5 7. Method according to one of the preceding claims, characterized in that no protocol conversion is required for signaling protocols of the same protocol family.

10 8. Method according to one of the preceding claims, characterized by the steps:

- Storage of the received signaling message in a storage device (30),
- Decision for or against a protocol conversion after the storage,
- After the decision, conversion of the stored signaling message or forwarding of the stored signaling message without protocol conversion.

20 9. Method according to one of the foregoing claims, characterized in that the signaling messages relate to a signaling for the transfer of voice data, in particular operating data packets, and/or in that the signaling messages relate to the performance of additional service features for the transfer of voice data.

25 10. Program with an instruction sequence, in the execution of which by a processor a method according to one of the preceding claims is carried out.

30 11. Network access device (100) for forwarding signaling messages according to a method according to one of the Claims 1 to 9,

12. Network access device (100) according to Claim 11, characterized by a protocol conversion device, which, based on a signaling message according to a first signaling protocol, produces a signaling message with the same control characteristics according to a second signaling protocol.